

**REMARKS**

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-12 and 14-20 are pending in this application. Claims 6, 14-17 and 20 are amended and claim 13 has been cancelled. Claims 1-5, 10-12, 18 and 19 have been withdrawn from consideration. Claims 1, 6 and 10 are the independent claims.

Applicants note with appreciation the Examiner's acknowledgement that certified copies of all priority documents have been received by the U.S.P.T.O. Action, summary at 12.

Applicants also respectfully note that the present action does not indicate that the drawings have been accepted by the Examiner. Applicants respectfully request that the Examiner's next communication include an indication as to the acceptability of the filed drawings or as to any perceived deficiencies so that the Applicants may have a full and fair opportunity to submit appropriate amendments and/or corrections to the drawings.

Applicants also request that a copy of an initialed PTO-1449 enclosed with the Information Disclosure Statement filed on June 30, 2005 be included in the Examiner's next communication.

**Example Embodiments of the Present Application**

Independent claim 6 recites a method for producing a polymer with dispersed fine metal particles. Example non-limiting embodiments of this feature are discussed throughout the instant specification. An organic

polymer used in the polymer with dispersed fine metal particles of independent claim 6 is crystalline, which allows for fine metal particles to be hardly eluted on a surface of the obtained polymer with dispersed fine metal particles.

**Rejections under 35 U.S.C. § 103**

***Matsumoto in view of Kotelnikova***

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Nature*, Vol. 405, pp. 328-330, May 18, 2000 by Matsumoto et al. ("Matsumoto") in view of *Cellulose Chem. Technol.*, vol. 36, no. 5-6, pp. 445-458 (2002) by Kotelnikova et al. ("Kotelnikova"). Applicants respectfully traverse this rejection for the reasons detailed below.

The Office Action stated that regarding claim 6, Matsumoto teaches an organic polymer having a lamellar crystalline structure having an acidic group, it also teaches that the polymer is intercalated with alkylamines, however it fails to teach a method for producing a polymer with dispersed fine particles in which metal fine particles are dispersed in an organic polymer; that Kotelnikova teaches a crystalline polymer matrix made of cellulose in which fine metal particles are dispersed via the following method: the crystalline polymer is mixed with a substance containing the metal ion and then the metal ion is reduced to obtain the fine metal particles; that it would have been obvious to one of ordinary skill in the art at the time of the invention to use the process as taught by Kotelnikova and apply it to the composition of Matsumoto; that one would have been motivated to do so in order to make the polymer of Matsumoto exhibit

electric and/or magnetic properties; and that they are combinable because they are concerned with the same field of endeavor, namely, crystalline polymers with intercalated materials. Applicants respectfully disagree.

The method using a crystalline organic polymer described in claim 6 and the methods of Matsumoto and Kotelnikova using general-purpose polymers (matrix and resin matrix) are different in that the methods have different steps in dispersing fine metal particles in the organic polymer. Moreover, the obtained polymers (complexes) with dispersed fine metal particles also contain different properties. That is, an organic polymer used in the polymer with dispersed fine metal particles of claim 6 is crystalline, and as such, is different from the polymers (matrix and resin matrix) used in Matsumoto and Kotelnikova.

Therefore, Applicants respectfully submit that one of ordinary skill in the art would not have combined Matsumoto and Kotelnikova to render obvious the method for producing a polymer with dispersed fine metal particles as recited in claim 6, because it is difficult to arrive at the series of steps for producing a polymer with dispersed fine metal particles via a metal ion-containing polymer as recited in claim 6 from a crystalline organic polymer having a specific structure or functional group as recited in Matsumoto and Kotelnikova.

The Applicants, therefore, respectfully request that the rejection to Claim 6 under 35 U.S.C. § 103(a) be withdrawn.

***Matsumoto in view of Kotelnikova and Won***

Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsumoto in view of Kotelnikova and JP 2002-179931 to

Won et al. ("Won"). Applicants respectfully traverse this rejection for the reasons detailed below.

Even assuming *arguendo* that Matsumoto and Kotelnikova could be combined with Won (which Applicants do not admit), the Examiner has failed to show how Won remedies the deficiencies of Matsumoto and Kotelnikova with respect to independent claim 6. Thus, claim 7 is patentable over Matsumoto and Kotelnikova and Won for the reasons set forth above with respect to independent claim 6.

The Applicants, therefore, respectfully request that the rejection to Claim 7 under 35 U.S.C. § 103(a) be withdrawn.

***Matsumoto in view of Seita***

Claims 13-17 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsumoto in view of U.S. Publication No. 2004/0072015 to Seita et al. ("Seita"). Applicants respectfully traverse this rejection for the reasons detailed below.

Claim 13 has been cancelled, and thus, the rejection of claim 13 is now rendered moot. Claims 14-17 and 20 have been amended to depend from independent claim 6. Claims 14-17 and 20, dependent, directly or indirectly, on independent claim 6, are patentable for the reasons stated above with respect to claim 6 as well as for their own merits.

The Applicants, therefore, respectfully request that the rejection to Claim 13-17 and 20 under 35 U.S.C. § 103(a) be withdrawn.

**CONCLUSION**


In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By  Erin G. Hoffman, Reg. No. 57,752  
Donald J. Daley, Reg. No. 34,313  
P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

DJD/EGH/dmc